Bakeries are Going Green

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Rising fuel prices and growing environmental awareness has driven food manufacturers to look at ways of reducing their environmental impact. In some cases, environmental initiatives have been implemented at the manufacturing level, where bakeries are reducing their energy consumption and even turning to renewable resources like solar power. In other cases, the greening efforts have occurred closer to the consumer, where attention has been given to reducing packaging or creating more environmentally friendly packaging. Reducing energy consumption and packaging often makes sense from a cost standpoint, but other environmental practices can increase costs, at least temporarily. Some bakeries see these costs as part of a larger community commitment, while in other cases environmental initiatives are turned into advertising aimed at the environmentally conscious consumer. The U.S. government has responded to this growing trend by reviewing its Guides for the Use of Environmental Marketing Claims. This article examines some of the ways and reasons food manufacturers are reducing their environmental impact and provides an update on the U.S. government’s marketing-related rules.

Creating Better Packaging

While some food manufacturers have taken steps to include environmentally friendly messages on their packaging, Bakers Delight has tried to reduce their packaging as much as possible. A bakery chain with more than 600 franchises spread across Australia, New Zealand, Canada, and the United States, where the company trades under the brand name COBS Bread, Bakers Delight produces a significant amount of its waste in the form of consumer packaging. As a result, the company has taken steps to control this type of packaging by reducing the amount of total packaging material, eliminating the use of non-recyclable materials, and developing more environmentally friendly alternatives.

According to Kendra Teasdale, corporate communications manager, Bakers Delight Holdings, “Bakers Delight’s aim is to discourage waste and inefficient use of packaging.”

The company “works with packaging suppliers on an ongoing basis in order to look at ways in which we can reduce the amount of product and ingredient packaging,” said Teasdale.

The company has set some ambitious goals—to reduce the total weight of consumer packaging by 10% per year to a minimum of 40% by 2010 and to reduce their reliance on nonrecyclable packaging materials by 20% by 2010.

One of the ways the company has done this is by making sure the appropriate sized package is used at all times. According to Teasdale, “Analysis of our packaging sizes is regularly conducted, ensuring that the most appropriate sized packages are utilized in our bakeries.” This simple step eliminates excess waste.

Another way the company has tried to control packaging is by reusing in-house materials. “A key element of this is ensuring that as much packaging used within the bakery as possible can be recycled or reused (e.g., white plastic tubs),” said Teasdale.

There are additional measures as well, such as eliminating the use of plastic. According to Teasdale, the company has developed its own “enviro-bag.” “Bakers Delight continues to research packaging options and alternatives to plastic bags, for instance, cornstarch carry bags and other recyclable packaging options (e.g., enviro bags and extensions of this range).
Regulating Environmental Messages

The rise in environmental advertising has caught the attention of the U.S. government. In November 2007, the U.S. Federal Register began a review of the U.S. Federal Trade Commission’s (“Green Guides,” otherwise known as the Guides for the Use of Environmental Marketing Claims. The review was originally scheduled for 2009, but, according to a recent FTC press release, “because of the current increase in green advertising claims, the Commission began the review a year early to ensure they reflect today’s marketplace.”

The FTC went on to say that, “since the Green Guides were last revised in 1998, there has been a significant increase in the use of environmental claims in product marketing, including ‘green’ claims concerning product packaging. Sellers and marketers frequently use terms addressed in the Green Guides, such as ‘recyclable,’ ‘recycled content,’ ‘biodegradable,’ ‘degradable,’ ‘compostable,’ or ‘refillable,’ to claim that their packaging is green.

“Sellers and marketers also are now using green claims that are not currently addressed in the Green Guides, including terms such as ‘sustainable’ and ‘renewable.’ When such claims are used to sell products, consumer perception and substantiation issues may arise.

“Also, in recent years, there has been an increase in the use of environmental seals and third-party certification programs purporting to verify the positive environmental impact of product packaging. Consumers may have varying interpretations of such seals and programs.”

As part of this review, the agency held a workshop January 8, 2008, to address the marketing of carbon offsets and renewable energy certificates. A second workshop occurred April 30, 2008, to address “developments in green packaging claims and consumer perception.” The deadline to submit comments was May 19, 2008, but the agency has said that they expect to announce additional workshops in the future.

“The Bakers Delight network promotes the use of calico and reusable plastic bags so as to reduce plastic bag wastage and landfill.”

The company has been involved in other significant environmental efforts, too, such as donating excess product to charities or even as animal feed. The company’s headquarters office has also tried to eliminate the use of paper.

“At the head office level, Bakers Delight Holdings continually investigates new ways to communicate with the bakery network in an attempt to reduce hardcopy communication materials. For instance, the Bakers Delight network makes use of an extranet with all bakery support materials and operations manual in addition to weekly e-newsletters,” said Teasdale.

In June 2002, the company worked with the Australian Federal Government’s Energy Efficiency Best Practice Program to build a showcase, energy-efficient bakery. The experiment was a success, with the bakery achieving a 32% savings in total energy costs and a 48% reduction in greenhouse gas emissions.

Some of the changes made to the bakery were simple, such as increasing the amount of insulation around the hot water heater and refrigerator, around the oven hood’s exhaust duct, and on the electric oven’s door and between the oven’s decks. Other changes had to do with the layout, such as locating the chiller as close as possible to the mixer in order to reduce the amount of pipe needed. One of the more technical changes had to do with replacing the oven hood’s fixed speed fans with adjustable speed versions that were automatically controlled by a light beam detector that indicated when the oven door was opened. (A full list of the bakery’s modifications can be found on the Australian Government Department of Industry, Tourism and Resources website at www.ren.gov.au/Documents/BakersDelightTableofImprovements20040206121512.pdf.)

All of these environmental efforts raise questions. What is the purpose? Are these environmental programs costing the company? Are they being incorporated into company advertising materials?

Bakers Delight sees its commitment to environmental, community, and social initiatives as part of its corporate culture, but it also recognizes that, “indeed, some environmental efforts do incur a cost increase,” said Teasdale. “This is somewhat of a challenge in a franchised network like Bakers Delight.”

The company overcomes this challenge by gaining “buy-in from the entire network—communicating the benefits both to the environment and the importance of up-holding our brand identity bears great importance.

“Our environmental efforts are not something that is communicated through our advertising—it is, however, communicated through our marketing. Product packaging and messaging on packaging highlights our efforts.” An example of this can be seen with the company’s use of in-store promotion, such as with the company’s enviro bags.

Turning to Renewable Resources

Frito-Lay is another company that has made a significant effort to become more environmentally friendly. Like Bakers Delight, Frito-Lay has made substantial efforts to reduce packaging and increase efficiency. Since 1999, Frito-Lay has cut their fuel usage per pound of product by 24%, their electricity usage by 21%, and their water use by 35%. They have been able to reuse the cartons that carry bags of chips to retail an average of five times before having to recycle them. According to the company, this effort alone has saved nearly five million trees. The company also recycles close to 20 million pounds of potato and corn solids to livestock and dairy farms, which reduces the company’s waste load sent to local wastewater treatment plants.

Frito-Lay captures methane at their Rosenberg, TX, facility and uses cogeneration at their Kern, CA, facility, a process that uses a power station to generate both electric power and heat. Whereas a conventional power plant would emit heat as a by-product, in a cogeneration facility the heat is used for other purposes.

As of late, however, Frito-Lay has become best known for its use of solar power. According to Aurora Gonzalez, spokesperson, Frito-Lay North America, “Frito-Lay is currently using a variety of renewable energy sources to help drive production and support our distribution centers.

“We have installed photovoltaic systems in seven distribution centers to provide electricity in those buildings. The most recent one at the Arizona Service Center in Phoenix produces 350,000 kilowatt hours of electricity.

“The newest major project is the installation of a solar panel field in Modesto, CA, which will produce steam to heat the boilers that are connected to our production lines. The field will generate enough steam to match the amount needed to make all the SunChips produced annually at the facility.”

Again, what motivates this level of commitment? Do environmental initiatives mean better business? Is environmentalism part of the company’s vision? Or, are these
environmental efforts being incorporated into the company’s advertising message?

In Frito-Lay’s case, the answer is all of the above. According to Gonzales, “There are long-term benefits to having a sustainability strategy—both for the business and the environment. Commitment to sustainable growth is a core Frito-Lay value, as it is for our parent company, PepsiCo.

“Ultimately, Frito-Lay believes that investments that help us diversify our energy sources will have long-term benefits for the company and the environment.”

As far as the advertising goes, according to Gonzales, “We have been exploring appropriate ways to share the story of our environmental efforts with our customers.”

In March 2008, the company launched a new solar-powered advertising campaign for SunChips. The so-called solar-powered billboards used an ingenious design whereby the lettering for the billboards actually stuck out, in reverse and upside down, from the top of the billboard such that when the sun shined the message appeared in shadow on the plain white front of the billboard. Newspaper ads used a similar design, with ads on the front and back of a page such that, when held up to the sun, the newspaper revealed the company’s message. The advertising was scheduled to coincide with, and build up to, the April 22, 2008, celebration of Earth Day.

With some companies, environmental advertising has been an empty promise, all glitz but no substance. Consumers have become weary after hearing details of environmental initiatives that cost a fraction of what the company spent on promoting the initiative. A March 2008 New York Times article referred to this practice as “greenwashing.” In Frito-Lay’s case, however, the environmental commitment has been substantial. While the SunChips ad campaign does acknowledge Frito-Lay’s environmental efforts, including the fact that SunChips are produced with solar power, no one can question the company’s multi-million dollar investment in solar panels at seven different facilities.

Ultimately, it seems that food manufacturers have different reasons for incorporating environmental initiatives. While the effect of environmental marketing continues to be explored, reducing energy consumption, developing better packaging, and using more renewable resources have proven, at least for Frito-Lay and Bakers Delight, to be positive business decisions and, most of all, benefits to the environment.

Small-Scale Solar Solutions

While global warming has dominated the discussion of environmentalism in developed countries, deforestation has been a major problem for many third world nations. Here, it is not commercial food manufacturers that are in the spotlight for their environmental impact, but rather, it is the ways in which local families produce their food that can have the greatest impact. According to SUN OVEN (Elburn, IL), more than 2 billion people use wood or charcoal to prepare their meals. The company’s solar-powered ovens target this demographic, offering a solution for global warming and deforestation.

While the idea of using the sun for cooking is not new, manufacturers of today’s advanced ovens have been able to overcome some of the cultural and technological challenges of placing solar-powered ovens into third world communities. An example of a cultural challenge is that, in most third world countries, people work during the day while the sun is up and then eat their primary meal once the sun is down. This makes it difficult to use a solar-powered oven to prepare a meal.

Another potential challenge is that some solar-powered ovens take much longer to cook food, meaning that the person responsible for preparing the meal would need to spend more time away from work.

SUN OVEN has overcome these challenges by developing portable, well-insulated ovens that generate the same amount of heat as a traditional wood fire and that are able to then keep food warm well into the evening. The largest such oven, the Villager Sun Oven, can produce 60 loaves of French bread per hour.

The company has been able to place thousands of units in more than 120 countries worldwide, thanks in part to a relationship they have with Rotary International and to a novel payment plan they have developed. According to Paul Munsen, president SUN OVEN, for a typical African bakery, energy costs represent 25% of the cost of retail bread. This cost is one of the greatest challenges of preparing food in Africa. SUN OVEN’s solution has been to allow families to pay for their equipment in small weekly installment payments that are comparable to the costs of buying charcoal or other cooking fuels.

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